

TRIBO.guard™

Advanced Bag Leak Detection and Dust Monitoring The First ... and Still ... The Best

MODEL 4002

- Continuous 4-20mA output and 0-100% LED bar graph
- Remote or integral sensor available
- Easy-to-use controls with standard window enclosure
- Optional TRIBO.prevent with Dual-Level Alarms
- Optional TRIBO.trac Leak Locator

The 4002 Dust Monitor continuously monitors the exhaust ducts of dust collectors in order to detect filter failures. The 4002 monitors sense dust levels in collector exhaust air and provide continuous analog (4-20 mA) outputs. When used with the 4002, the TRIBO.prevent Dual-Level Alarm System provides both early warning and high level (reportable incident) alarms. The 4002 Monitors are also used in conjunction with the TRIBO.trac Leak Locator System which allows operators to automatically pinpoint dust collector leaks by row or compartment from a remote location.

TRIBO.guard monitors use the original triboelectric technology, introduced by Auburn nearly twenty-five years ago. The 4002 measures triboelectricity (also referred to as frictional electrification), an electric charge transfer which results when dust particles collide with the sensor probe. The 4002 detects changes in the dust level of collector exhaust air to warn when a filter is failing before emissions become visible. The continuous analog output allows the use of dataloggers or other devices to record emissions levels, pinpoint maintenance problems, or document Clean Air compliance. Unlike optical devices that rely on clean, aligned lenses and indirect measurement of light transmission, the 4002 is a virtually maintenance-free, direct method of bag leak detection; failures are detected promptly and reliably.

The 4002 Monitors are available in an integral sensor configuration with a NEMA 4 enclosure or in a remote sensor configuration with a NEMA 4/7/9 electronics enclosure and NEMA 4X sensor enclosure. The 4002 Monitors have a front glass window which allows process control and maintenance personnel to check dust collector performance at a glance without opening the enclosure.



TRIBO.series™ Products and Services

TRIBO.series dust detectors incorporate triboelectric technology, developed exclusively by Auburn, now updated and improved to address more challenging dust collector maintenance and performance requirements appearing in, virtually, every materials manufacturing industry.

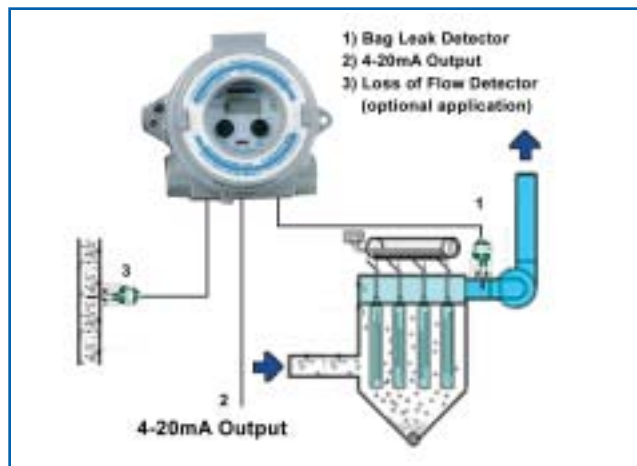
Call for more information or go to www.auburnsys.com

Today's standard for bag leak detection...

... from simple physics to useful technology



MODEL 4002



ELECTRONICS SPECIFICATIONS

DC-coupled circuitry for optimum response and linear correlation over the entire operating range.

ELECTRONICS ENCLOSURE	NEMA 4 rating (integral sensor) NEMA 4/7/9 rating (remote sensor)
HAZARDOUS RATING	Designed for Class I & II, Div. 1 & 2, Group B,C,D,E,F&G. CE Approved.
HUMIDITY RANGE	0 to 95% relative, noncondensing
OUTPUT	4-20 mA non-isolated, 500 Ohm loop maximum; 10 segment LED bar graph (0-100%)
POWER REQUIRED	105-130VAC (210-260VAC or 10-32VDC optional), 50/60 Hz, 5 Watts maximum load
SENSITIVITY RANGE	Adjustable 100 to 1 range; 0.0005gr/dscf (1 mg/m ³) typical detection
SENSITIVITY SETPOINT	Baseline level setting indicated by first segment of LED bar graph
SMOOTHING	Adjustable from 0.1 to 22 seconds
TEMPERATURE RANGE	20° to 140°F (-30° to 60°C)

SENSOR SPECIFICATIONS

SENSOR PROBE	316 Stainless Steel standard; other materials available. Specify length to reach or exceed mid-duct.
OTHER WETTED PARTS	303 Stainless Steel minimum grade
INSERTION LENGTH	3, 6, 12, 18, 30, 36 inch (7.6, 15.2, 30.5, 45.7, 76.2, 91.4 cm) Integral - Custom lengths available up to 30" (76.2cm) Remote - Custom lengths available up to 36" (91.4cm)
INTEGRAL SENSOR ASSEMBLY	Quick release fitting with ferrule, clamp and gasket. Extended PFA insulator, usable in gas streams to 160°F (70°C).
REMOTE SENSOR ASSEMBLY	Quick release or ½" NPT mounting and extended PFA insulator, usable in gas streams to 450°F (235°C). NEMA 4X enclosure.
OPTIONS	Ceramic insulator, usable in gas streams to 1,000°F (540°C). Air purge*.

*Air purge provides annular purge around the insulator to prevent conductive bridging of the probe to the duct wall; consult the factory for proper application of air purge.